

## ORIGINAL ARTICLE

# Assessment of burnout among health workers and bankers in Aba south local government area, Abia state, South East Nigeria

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## Abstract

**Aim:** To determine the prevalence of burnout among health workers and bankers in Aba South Local Government Area in Abia State.

**Materials and Methods:** A cross-sectional, descriptive study was carried out in 2013 among health workers and bankers in Aba metropolis. By multistage sampling method, proportionate number of the health workers and bankers were selected. The study instrument was Freudenberger Burnout Scale.

**Results:** A total of 327 health workers and bankers were studied: 253 (77.4%) were health workers while 74 (22.6%) were bankers. The age range was 21 to 59 years, and 229 (70.0%) were females. Most (48.3%) had worked for 5 years or less and had burnout scores within 0-25. There was significant difference between gender ( $P = 0.017$ ), level of education ( $P = 0.038$ ), and type of occupation ( $P = 0.002$ ) to burnout score. Age ( $P = 0.956$ ), marital status ( $P = 0.461$ ), and years of work ( $P = 0.247$ ) did not significantly affect burnout score. Female health workers were significantly more at risk of burning out compared to their male counterparts. Among bankers, however, though females were more at risk, this was not significant. Sex, level of education and type of work were the greatest contributors to burnout score.

**Conclusion:** The prevalence of burnout risk among health workers and bankers is high. More female health workers are at risk of burnout than male health workers. There should be policies aimed at identifying those most at risk and reducing the prevalence.

**Key words:** Bankers, burnout, freudenberger, health workers, Nigeria

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## Introduction

Work-related illness is increasingly becoming a major determinant of health status of workers. This may be because of increasing awareness among workers of their work environment or due to increasing exposure of workers to hazardous substances and/or conditions. These health effects have been well documented in several occupations.<sup>[1,2]</sup> Of major interest in determining wellness among workers is work-related stress. Workers in an attempt to comply with the demands of work might be faced with some stressors, which in turn can affect the worker's health and productivity.

Chronic stress may lead to burnout syndrome - defined as persistent emotional exhaustion, physical fatigue, and cognitive weariness.<sup>[3]</sup> Burnout follows two processes,<sup>[4]</sup> the first is related to job demands and over taxation, which further leads to exhaustion. The second process relates to a lack of job resources (money, materials, and manpower); this process is prominent in resource-poor settings. Whatever process that brings in burnouts, its effects can be on the organization and/or to the individual.

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To the organization, there will be some level of low productivity, staff lateness to work, frequent medical reports, and frequent quitting.<sup>[4,5]</sup> To the individual, burnout is characterized by symptoms such as chronic exhaustion leading to use of higher energy to carry out a duty, sleep disturbances, headache, emotional exhaustion and fatigue, apathy, negative attitudes towards the job, colleagues and clients, job withdrawals, and feelings of guilt. Consequently, burnout is known to increase the risk of developing myocardial infarction, ischemic heart disease, stroke, and sudden cardiac death. Other effects of burnout include increased likelihood of type II diabetes, male infertility, and musculoskeletal disorders among those with the extreme physical, mental, and emotional fatigue.<sup>[3]</sup> It can also give rise to some psychosomatic anomalies, which can extend to the family, and consequently, the person may resort to alcohol and substance abuse.

Burnout in workplaces has been attributed to some factors, which can be broadly classified as organizational and individual factors. Some organizational factors which contribute to stress include workload, work conflicts, diminished resources, job insecurity, effort-reward imbalance, and delayed gratification. Others are understaffing and continuing rapid organizational changes.<sup>[6]</sup> Burnout has been attributed to occur in workers as a result of failure to cope with occupational stress, especially professions requiring intensive communication and interaction with service recipients.<sup>[7]</sup> Though there is basically no profession that is free from some level of burnout, professions such as medical, teaching, banking, and managers have been known to have a higher risk of burnout than others.<sup>[8]</sup> Studies have shown an incidence of up to 30% burnout syndrome among teachers<sup>[9]</sup> and 10% for health professionals.<sup>[10]</sup> These professions are people-oriented (interactions with other people; clients, students, customers, patients etc.) rather than dealing with things and information.<sup>[11]</sup> In the banking sector, employees experience burnout because of the amount of time they spend in their respective banks.<sup>[12]</sup> The lack of administrative support from managers, work overload, time pressure, and poor work/family balance are all causes of stress in the banking sector.<sup>[13]</sup> Health workers are also faced with some burnouts as a result of various stresses encountered at the workplace. Dealing with dying and suffering patients is inevitable in the medical profession. Health workers in the oncology unit, for example, manage one form of cancer or the other where, in most instances, these patients die after much sufferings and emotional attachment to their doctors. This situation can be a source of high-leveled stress to the managing team.<sup>[14]</sup> Other sources of burnout in the health sector can be linked to seniority and workplace factors as can be seen among nurses and other cadre of health care staff.<sup>[15]</sup>

Individual factors that may contribute to burnout include demographic variables (age, marital status, and educational level); personality traits (low hardiness and

poor self-esteem); and job attitudes (unrealistically high expectations, poor salary).<sup>[6]</sup> The findings of studies on the role of these individual factors to burnout are conflicting. In a study, females, younger, and new employees tend to experience more symptoms of burnout,<sup>[10]</sup> while in another study, males had greater burnout, and there was no significance difference in age and years of teaching.<sup>[16]</sup> In yet another study, there was no significant gender difference in prevalence of burnout.<sup>[17]</sup>

This study, therefore, aims to determine the prevalence and to identify the predictors of burnout among the health profession and bankers.

## Materials and Methods

A cross-sectional, descriptive study was carried out between February and March 2013 among health workers in a tertiary health facility (Abia State Teaching Hospital, Aba) and bankers in Commercial banks - both in Aba metropolis. Aba is a major commercial town in South east Nigeria with trading and teaching as the main occupations. The teaching hospital is the only tertiary facility in the local government. It has staff strength of 1,983 health workers (i.e. doctors, nurses, laboratory personnel). There are 12 commercial banks in the same local government area with total staff strength of 652. Calculated sample size was 246 for health workers and 59 for bankers based on prevalence studies obtained in Pinder<sup>[18]</sup> *et al.* and katyal *et al.*,<sup>[19]</sup> respectively. Proportionate number of the health workers and bankers were selected (253 health workers and 74 bankers, giving a total of 327). To select the health workers, multistage method was used, while for bankers, cluster method was used to select all the bankers from 3 banks. Ethical permit was obtained from University of Nigeria Teaching Hospital Ethics Committee and informed consent from the management and staff of Abia State University and 3 selected banks.

Data collecting tool was questionnaire that was adapted from Freudenberger Burnout Scale.<sup>[20]</sup> Demographic variables like age, sex, occupation, marital status, and years of employment were included in the questionnaire. It was pre-tested in the teaching hospital and a bank in Port Harcourt, Rivers State, which is a neighboring state to study area with similar socio-cultural environment as the study area. Respondents were asked to rate themselves on a scale. There were 15 questions. For each of the 15 questions, the respondent chose a number from 0-5 that showed how he/she has felt during the last 3 months. For each respondent, the total score was then provided at end of the 15 questions. This test is not meant to replace a clinical assessment but rather to help the person judge how he/she is doing. If the score was high, the person was advised to seek help.

## Data analysis and interpretation

Interpretation of burnout score (Freudenberger)

- Score 0-25 may indicate you are doing fine
- Score 26-35 may indicate at risk of burnout
- Score 36-50 may indicate person is candidate for burnout
- Score 51-65 may indicate person is burning out
- Score above 65 may indicate person has burnout.

Demographic variables are presented as frequencies. Chi square was used to compare the burnout score ranges and the variables like age, sex, marital status, education, occupation, and years of work. Chi square was also used to compare the gender and burnout scores in each occupation studied i.e. health staff and bankers. Multinomial Logistic Regression was used to predict likelihood that a worker has burnout if certain parameters like sex, education, type of work are known. For all analysis done, Confidence Interval was 95%, and *P* values less than 0.05% were regarded as significant.

## Study limitation

This tool used an informal approach to assess burnout. While it is intuitively useful, it has not been validated through controlled scientific tests.<sup>[20]</sup> It was, however, pre-tested in another community and had been previously adapted for use by some researchers.<sup>[20-22]</sup> Another limitation is that recent events may have a disproportionate influence on respondents' mood at the time the test was taken.

## Results

A total of 327 health workers and bankers were studied: 253 (77.4%) were health workers, while 74 (22.6%) were bankers. The age range was 21 to 59 years, and gender distribution was 229 (70.0%) females, while 98 (30%) were males. Most (310: 94.8%) had tertiary education and were married (205: 62.7%). One hundred and fifty eight (48.3%) had worked for 5 years or less, while only 8 (2.4%) had worked for more than 30 years. The burnout score ranged from 0-65: Most of the scores were within 0-25 [Table 1]. The prevalence of burnout in workers that were aged 40 years or less was 24.5%, while it was 24.2% in those aged more than 40 years. This difference was not statistically significant. In terms of gender, the prevalence of burnout risk was significantly more in females (27.5%) than in males (17.3%); *P* = 0.017. Level of education significantly affected risk of burnout (*P* = 0.038). More educated staff was less at risk of burnout. Also, burnout was more in bankers (37.8%) than in health staff (20.6%), and this was significant (*P* = 0.002): [Tables 2 and 3].

About 21.7% of unmarried staff was at risk of burnout, while it was 26.3% among married staff. This difference was not statistically significant (*P* = 0.461). Years of work did not affect burnout among workers (*P* = 0.74); [Tables 2 and 3].

In [Table 4], within same occupation, female health workers were significantly more at risk of burning out compared to their male counterparts. Among bankers, however, though females were more at risk, this was not significant. Table 5 indicates predictors to developing burnout. Sex, level of education, and type of work were the greatest contributors to burnout score.

## Discussion

Every occupation has stressors, which if poorly managed can result in burnout with its attendant problems: Increase in poor health conditions, lower effectiveness at work, decreased job satisfaction, and reduced commitment to the job or the organization.<sup>[11]</sup> The present study set out to assess the level of burnout among healthcare workers and

**Table 1: Socio-demographic distribution and burnout scores of respondents (total=327)**

Variable	Frequency (N=327)	Percent
Age distribution		
16-25	32	9.8
26-35	182	55.7
36-45	80	24.4
46-55	29	8.9
56 and above	4	1.2
Age range 21-59		
Sex distribution		
Female	229	70.0
Male	98	30.0
Marital status		
Single	120	36.7
Married	205	62.7
Separated/divorced	2	0.6
Educational status		
Primary	1	0.3
Secondary	16	4.9
Tertiary	310	94.8
Occupation		
Health worker	253	77.4
Banker	74	22.6
Years of work		
1-5	158	48.3
6-10	79	24.2
11-15	42	12.8
16-20	26	8.0
21-25	9	2.8
26-30	5	1.5
31-35	8	2.4
Burnout score (range=0-60)		
0-25	247	75.5
26-35	42	12.9
36-50	33	10.1
51-65	5	1.5
>65	0	0.0

**Table 2: Association between selected demographic characteristics and burnout scores**

Variable	Burnout score (%)					$\chi^2$ (P value)
	Doing well	At risk of burnout or already burning out				
		0-25 (N=247)	26-35 (N=42)	36-50 (N=33)	51-65 (N=5)	
Age (years)						
≤ 40	200 (75.5)	36 (13.6)	25 (9.4)	4 (1.5)	265 (100.0)	1.201 (0.753)
> 40	47 (75.8)	6 (9.7)	8 (12.9)	1 (1.6)	62 (100.0)	
Sex						
Female	166 (72.5)	37 (16.2)	21 (9.2)	5 (2.1)	229 (100.0)	10.252 (0.017)*
Male	81 (82.7)	5 (5.1)	12 (12.2)	0 (0.0)	98 (100.0)	
Marital status						
Single	94 (78.3)	16 (13.3)	10 (8.4)	0 (0.0)	120 (100.0)	6.616 (0.358) <sup>†</sup>
Married	151 (73.7)	26 (12.7)	23 (11.2)	5 (3.1)	205 (100.0)	
Separated/divorced	2 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (100.0)	
Education						
Primary	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	1 (100.0)	8.8657 (0.194) <sup>†</sup>
Secondary	9 (56.3)	3 (18.8)	4 (24.9)	0 (0.0)	16 (100.0)	
Tertiary	238 (76.8)	38 (12.3)	29 (9.4)	5 (1.5)	310 (100.0)	
Occupation						
Health staff	201 (79.4)	30 (11.9)	18 (7.1)	4 (1.6)	253 (100.0)	11.530 (0.009)*
Banker	46 (62.2)	12 (16.2)	15 (20.3)	1 (1.3)	74 (100.0)	
Years of work (years)						
≤ 5	116 (73.4)	24 (15.2)	18 (11.4)	0 (0.0)	158 (100.0)	6.78 (0.083)
> 5	131 (77.5)	18 (10.7)	15 (8.9)	5 (2.9)	169 (100.0)	

\*Significant, <sup>†</sup>Likelihood ratio Chi square**Table 3: Demographic variable and summary interpretation of burnout score i.e. doing well (desirable burnout score) or at risk of burnout**

Variable	Doing well (burnout score = ≤25)	At risk of burnout (burnout score = >25)	Odds ratio (CI)	$\chi^2$ (P value)
	N=247	N=80		
Age (years)				
≤40	200 (75.5)	65 (24.5)	0.98 (0.49-1.95)	0.01 (0.956)
>40	47 (75.8)	15 (24.2)		
Sex				
Female	166 (72.5)	63 (27.5)	0.55	3.84 (0.050)*
Male	81 (82.7)	17 (17.3)	(0.29-1.04)	
Marital status				
Single	94 (78.3)	26 (21.7)	NA	1.55 (0.461)
Married	151 (73.7)	54 (26.3)		
Separated/divorced	2 (100.0)	0 (0.0)		
Education				
Primary	0 (0.0)	1 (100.0)	NA	6.57 (0.038)*
Secondary	9 (56.3)	7 (43.7)		
Tertiary	238 (76.8)	72 (23.2)		
Occupation				
Health staff	201 (79.4)	52 (20.6)	2.35	9.26 (0.002)*
Banker	46 (62.2)	28 (37.8)	(1.29-4.27)	
Years of work				
≤5	116 (73.4)	42 (26.6)	0.80	0.74 (0.389)
>5	131 (77.5)	38 (22.5)	(0.47-1.37)	

\*Significant, NA=Not applicable; CI=Confidence interval

bankers in the region where such information were either non-existent or limited. Findings indicate that almost 25% of the study population were either at risk/candidates for

burnout or were already burning out. This rate is high and implies a high rate of stress inherent in banking and health institutions. The finding is, however, less than that

**Table 4: Burnout scores of bankers and health workers by gender**

Occupation	Doing well (burnout score = ≤25) N=	At risk of burnout (burnout score = >25) N=	Total	Odds ratio/C.I.	χ <sup>2</sup> (P value)
Health staff					
Female	131 (74.9)	44 (25.1)	175 (100.0)	0.34 (0.14-0.80)	7.32 (0.007)*
Male	70 (89.7)	8 (10.3)	78 (100.0)		
Banker					
Female	23 (59.0)	16 (41.0)	39 (100.0)	0.75 (0.26-2.14)	0.36 (0.551)
Male	23 (65.7)	12 (34.3)	35 (100.0)		

\*Significant, C.I=Confidence interval

**Table 5: Multinomial logistic regression**

Is staff burnout present? <sup>a</sup>	B	Std. error	Wald	df	Sig.	Exp (B)	95% confidence interval for Exp (B)	
							Lower bound	Upper bound
No burnout: Intercept								
Sex	-2.935	1.926	2.321	1	0.128	-	-	-
Education	0.850	0.327	6.763	1	0.009	2.339	1.233	4.437
Type of work	1.358	0.498	7.447	1	0.006	3.889	1.466	10.313
	-1.190	0.309	14.832	1	0.000	0.304	0.166	0.557

a. The reference category is: At risk of burnout or burning out

of an earlier report among critical care physicians.<sup>[23]</sup> The previous report could be attributed to the nature of work and the work environment, having been conducted among Intensive Care Unit physicians who handle emergencies most of the time. The present report is, however, higher than that found among non-clinical staff in another study.<sup>[24]</sup> Indeed, other studies have also indicated high prevalence of stress and burnout among health workers,<sup>[18,23,25]</sup> bankers,<sup>[19]</sup> teachers,<sup>[26]</sup> police,<sup>[27]</sup> etc., These occupations are often associated with intensive communication and interaction with service recipients, high task and target orientation, long hours of work, and high workloads. These are among the work stressors that may contribute to burnout.

Health workers like bankers work long hours in stress-prone environments and, therefore, suffer burnout more than the general population.<sup>[28]</sup> However, from our study, bankers were significantly more at risk of burnout than health workers. This may be from job insecurities and poor organizational culture, which surround the banking industry presently in Nigeria. The study area is a commercial town with bankers given high targets to achieve and also competing aggressively for customers. This may lead to increased workload and stress on the staff. In such towns, many banks are known to frequently lay off their staff to save running cost. As noted in previous studies, job insecurity<sup>[29]</sup> and poor organizational culture<sup>[30]</sup> were associated with increase in burnout among staff. On the other hand, employees who have burnout are likely to reduce their level of commitment to the organization and some may even quit.<sup>[31]</sup>

Gender has been observed to influence prevalence of burnout. Though in one study, men were observed to have

higher burnout,<sup>[16]</sup> in many other studies, burnout was observed to be more in females.<sup>[11,32-34]</sup> In addition, while men had stronger association between work stressors and burnout, women had stronger association between performance-based self-esteem and burnout.<sup>[35]</sup> These findings were further confirmed by the present study, which showed a statistically significant higher level of burnout among the females compared to the males. This could be as a result of the dual role performed by women as responsible workers in their offices as well as caring mothers, wives, and housekeepers at homes. The ability to manage the family and work is important in the reduction of the effects of burnout. The inability to cope with the family/work interface leads to consistent headaches, insomnia, and other psychological problems among the workers.<sup>[36]</sup> Other work-related factors which are more prevalent in women and may be associated with stress include lower education, lower income, harassment, physical demands, physical hazards, and low job satisfaction.<sup>[37]</sup>

There are also conflicting reports on the influence of age and length of service on rates of burnout. While some report increased burnout among older workers with many years of service,<sup>[38,39]</sup> others found burnout more among younger and inexperienced workers.<sup>[40,41]</sup> In the present study, although burnout was higher in the younger workers (40 years or less) and in those with fewer years of service (less than 5 years) than among older workers (above 40 years) and those with more years of service (over 5 years), the difference was not statistically significant. Thus, the impact of age and length of service on occurrence of burnout was not established in this study. The non-significant difference observed in present study may be because while the younger worker has



anxiety from job expectations, his older counterpart may be concerned about retirement and the poor incentives at work.

Marriage comes with added roles and responsibilities, which could be stressful and contribute to the development of burnout. Despite this, various studies have reported contradictory results. Our study found higher level of burnout among the married than the single although the difference was not statistically significant. Maecelino *et al.*<sup>[39]</sup> also reported increased burnout among the married than the single, while Popa *et al.*,<sup>[42]</sup> found no correlation between burnout and marital status. However, in yet another study, burnout among singles was observed to be more than even among divorcees.<sup>[11]</sup> Indeed, marital status of the worker could play a contributory role to burnout depending on the relationship of the spouses and the coping mechanisms by individuals to stress.

Respondents with tertiary education were significantly less likely to have burnout than those with less education. This is probably due to better working conditions and remuneration when compared to the less educated. Swietochowski<sup>[43]</sup> also reported considerably lower threat of the burning out syndrome in university than high school teachers. Interestingly, the opposite was observed by Maslach *et al.*<sup>[11]</sup> who suggested that the findings of more burnout among people with higher education may be because they are more exposed to burnout due to their heavier responsibilities or because of their higher expectations.

## Conclusion

Burnout among bankers and health workers was very high in the study area. Female workers, bankers, and staff with lower level of education were more likely to be at risk of burnout than their counterparts. Hence, efforts should be made by the management of institutions, especially Human Relations Departments, to put in place policies targeted at reducing the risk of burnout in workplaces. There should also be assessment of workplace stressors, especially among those more vulnerable, and measures put in place to mitigate them.

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